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| APPLICATION NO.        | FII  | LING DATE            | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|------|----------------------|----------------------|---------------------|------------------|
| 10/824,691             | 0    | 4/14/2004            | Yusheng Zhao         | S-102,389           | 8078             |
| 35068                  | 7590 | 09/20/2005           | •                    | EXAM                | INER             |
|                        |      | ALIFORNIA            |                      | HOFFMAN             | N, JOHN M        |
| LOS ALAM<br>P.O. BOX 1 |      | DNAL LABORATO<br>187 | RY                   | ART UNIT            | PAPER NUMBER     |
| LOS ALAM               | ,    |                      |                      | 1731                |                  |

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.   | Applicant(a)  |  |  |  |  |  |
|--|---|---|--|--|--|--|--|
|  | Application No.   | Applicant(s)  |  |  |  |  |  |
| Office Action Summary  | 10/824,691  | ZHAO ET AL.   |  |  |  |  |  |
| Onice Action Summary   | Examiner  | Art Unit  |  |  |  |  |  |
| The MAILING DATE of this communication app   | John Hoffmann   | 1731  |  |  |  |  |  |
| Period for Reply   | bears on the cover sheet with the t   | onespondence address  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE  | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |  |  |  |
| Status   |   |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 22 A  | N⊠ Responsive to communication(s) filed on <u>22 August 2005</u> .  |   |  |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□ This   | This action is <b>FINAL</b> . 2b) ☐ This action is non-final.   |   |  |  |  |  |  |
|  | · · · · · · · · · · · · · · · · · · ·   |   |  |  |  |  |  |
| closed in accordance with the practice under E   | Ex parte Quayle, 1935 C.D. 11, 4  | 53 O.G. 213.  |  |  |  |  |  |
| Disposition of Claims  | •   | •   |  |  |  |  |  |
| 4) ☐ Claim(s) 6-10 and 12-22 is/are pending in the 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 6-10, 12-22 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or  | wn from consideration.  |   |  |  |  |  |  |
| Application Papers   |   |   |  |  |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine 11.   | epted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob  | e 37 CFR 1.85(a).<br>njected to. See 37 CFR 1.121(d).                       |  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list   | s have been received. s have been received in Application of the second | ion No<br>ed in this National Stage   |  |  |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date   | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:   |   |  |  |  |  |  |

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## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims <u>6-10, 12-22</u> are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Examiner could find no support for the newly claimed encapsulating at a pressure in the range of from 15 to 25 GPa – either explicit or implicit. This is deemed to be a prima facie showing on failure to comply with the requirement. The burden is now on Applicant to show the requirement is complied with, or to amend the claims so that they comply. Whereas the there is disclosure for 15-25 GPa pressure, such is disclosed as being applied after the powder has be encapsulated.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims <u>6-10, 12-22 are</u> rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 6, lines 6-7 read, "ball-milled, the ball-milled mixture...." It is unclear if the term "mixture" should appear after the first "ball milled".

## Response to Arguments

Applicant's arguments, see page 6, lines 17-20, filed 22 August 2005, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of those arguments. The other prior art rejections are also withdrawn for the same reason: they do not teach that the "mixture is encapsulated under pressure first and then...heated...."

## Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

John Hoffmann

Primary Examiner

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jmh